Skylight Replacement

10/24/2012

City of Gallatin

1.0 Introduction

The City of Gallatin Leisure Service is seeking bids for Removal and Replacement of Translucent Skylights. Bids will be due on November 9th 2012 at 1:00 pm in a sealed envelope clearly marked: **Skylight Replacement.**

1.1 Scope of Work

The City of Gallatin Leisure Services seeks to have skylights removed and replaced at the Civic Center located at 210 Albert Gallatin Road, Gallatin TN, 37066.The awarded vendor will make sure that skylights are installed properly and any damage incurred during removal or installation will be repaired. Price for this project is all inclusive and no change orders will be accepted.

2.0 Technical Requirements

2-3/4″ INSULATED TRANSLUCENT FIBERGLASS SANDWICH PANEL SKYLIGHT SYSTEM

A Submit manufacturer's product data: Include construction details, material descriptions, profiles and finishes of skylight components.
B. Submit shop drawings. Include elevations and details.
C. Submit manufacturer’s color charts showing the full range of color; available for factory-finished aluminum.
1. When requested, submit samples for each exposed finish required, in same thickness and material indicated for the work and in size indicated below. If finishes involve normal color variations, include sample sets consisting of two or more units showing the full range of variations expected.
a. Sandwich panels: 14" x 28" units
D. Submit Installer Certificate, signed by installer, certifying compliance with project qualification requirements.
E. Submit product reports from a qualified independent testing agency indicating each type and class of panel system complies with the project performance requirements, based on comprehensive testing of current products. Previously completed reports will be acceptable if for current manufacturer and indicative of products used on this project.

1. Reports required are:
a. International Building Code Evaluation Report
b. Flame Spread and Smoke Developed (UL 723) - Submit UL Card
c. Bum Extent (ASTM D 635)
d. Color Difference (ASTM 0 2244)
e. Impact Strength (UL 972)
f. Bond Tensile strength (ASTM C 297 after aging by ASTM D 1037)
g. Bond Shear Strength (ASTM D 1002)
h. Beam Bending strength (ASTM E 72)
i. Fall Through Resistance (ASTM E 661)
j. Insulation U-Factor (NFRC 100)
k. NFRC System U-Factor Certification (NFRC 700)
I. Solar Heat Gain Coefficient (NFRC or Calculations)
m. Condensation Resistance Factor (AAMA 1503)
n. Air Leakage (ASTM E 283)
o. Structural Performance (ASTM E330)
p. Water Penetration (ASTM E 331)
q. Class A Roof Covering Burning Brand (ASTM E

QUALITY ASSURANCE

Manufacturer's Qualifications
1. Material and products shall be manufactured by a company continuously and regularity employed in the manufacture of specified materials for a period of at least ten consecutive years and which can show evidence of those materials being satisfactorily used on at least six projects of similar size, scope and location. At least three of the projects shall have been in successful use for ten years or longer.

2. Panel system must be listed by an ANSI accredited Evaluation Service, which requires quality control Inspections and fire, structural and water infiltration testing of sandwich panel systems by an accredited agency.

3. Quality control inspections shall be conducted at least once each year and shall include manufacturing facilities, sandwich panel components and production sandwich panels for conformance With AC177 "Translucent Fiberglass Reinforced Plastic (FRP) Faced Panel Wall, Roof and Skylight Systems" as issued by the ICC-ES.

Installer's Qualifications:
Installation shall be by an experienced installer, which has been in the business of installing specified skylight systems for at least two consecutive years and can show evidence of satisfactory completion of projects of similar size, scope and type.

PERFORMANCE REQUIREMENTS

A. The manufacturer shall be responsible for the configuration and fabrication of the complete skylight panel system.
1. When requested, include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
2. Standard skylight system shall have less than 0.01 cfrnJft2 air leakage by ASTM E 283 at 6.24 PSF (50 mph) and no water penetration by ASTM E 331 at 15 PSF; and structural testing by ASTM E 330.
3. Structural Loads; Provide skylight system capable of handling the following minimum loads:
a. Live Load: 25 PSF
b. Wind Load: 25 PSF

DELIVERY STORAGE AND HANDLING

A. Deliver panel system, components and materials in manufacturer's standard protective packaging.
B. Store panels on the long edge; several inches above the ground, blocked and under cover in accordance with manufacturer's storage and handling instructions.

WARRANTY
A. Submit manufactures and installer's written warranty agreeing to repair or replace panel system work, which fails in materials or workmanship within one year of the date of delivery. Failure of materials or workmanship shall include leakage, excessive deflection, insulated translucent sandwich panels and other components of the work.

PRODUCTS

Face Sheets
1. Translucent faces: Manufactured from glass fiber reinforced thermoset resins, formulated specifically for architectural use.
a. Thermoplastic (e.g. polycarbonate, acrylic) faces are not acceptable.
b. Face sheets shall not deform, deflect or drip when subjected to fire or flame.
2. Interior face sheets:
a. Flame spread: Underwriters Laboratories (UL) listed, which requires periodic unannounced retesting, with flame spread rating no greater than _50 __ and smoke developed no greater than 250 when tested in accordance with UL 723.
b. Bum extent by ASTM D 635 shall be no greater than 1".

3. Exterior face sheets:
a.Color stability: Full thickness of the exterior face sheet shall not change color more than 3 CIE Units DELTA E by ASTM D 2244 after 5 years outdoor South Florida weathering at 5°facing south, determined by the average of at least three white samples with and without a protective film or coating to ensure long-term color stability. Color stability shall be unaffected by abrasion or scratching.
b. Strength: Exterior face sheet shall be uniform in strength, impenetrable by hand held pencil and repel an impact minimum of 70 ft. lbs. without fracture or tear when impacted by a 3-1/4" diameter, Sib. free-falling ball per UL 972.
4. Appearance:
a. Exterior face sheets: Smooth,.070 thick and - Ice Blue in color.
b. Interior face sheets: Smooth, .045 thick and - White in color.
c. Face sheets shall not vary more than ± 10% in thickness and be uniform in color.
Grid Core
1. _Thermally Broken I-beam grid core shall be of 6063-T6 or 6005-T5 alloy and temper
with provisions for mechanical interlocking of muntin-mullion and perimeter. Width of l-beam shall be no less than 7/16".
2. l-beam Thermal break: Minimum 1", thermoset fiberglass composite.
Laminate Adhesive
1. Heat and pressure resin type adhesive engineered for structural sandwich panel use, with minimum 25-years field use. Adhesive shall pass testing requirements specified by the International Code Council Acceptance Criteria for Sandwich Panel Adhesives".
2. Minimum tensile strength of 750 PSI when the panel assembly is tested by ASTM C 297 after two exposures to six cycles each of the aging conditions prescribed by ASTM 0 1037.
3. Minimum shear strength of the panel adhesive by ASTM 0 1002 after exposure to four separate conditions:
a. 50% Relative Humidity at 68° F: 540 PSI
b. 1820 F: 100 PSI
c. Accelerated Aging by ASTM 0 1037 at room temperature: 800 PSI
d. Accelerated Aging by ASTM 0 1037 at 1820 F: 250 PSI

PANEL CONSTRUCTION

A. Provide sandwich panels of flat fiberglass reinforced translucent face sheets laminated to a grid core of mechanically interlocking I-beams. The adhesive bonding line shall be straight cover the entire width of the l-beam and have a new~ sharp edge.

1. Thickness: 2-3/4″
2. Light transmission: 20%
3. Solar heat gain coefficient: 28.
4. Panel U-factor by NFRC certified laboratory: 2-3/4fl thermally broken grid.
5. Complete Insulated panel system shall have NFRC certified U-factor of .28.
6. Grid pattern: Nominal size 12" x 24" ; pattern ---.:Shoji.

B. Standard panels shall deflect no more than 1.9" at 30 PSF in 10' 0" span without a supporting frame by
ASTM En.

C. Standard panels shall withstand 12000 F fire for minimum one hour without collapse or exterior flaming.

D. Thermally broken panels: Minimum Condensation Resistance Factor of 80 by AAMA 1503 measured on
the bond line.

E. Skylight System:

1. Skylight system shall pass Class A Roof Burning Brand Test By ASTM E 1 DB.

F. Skylight System shall meet the fall through requirements of OSHA 1910.23 as demonstrated by testing in accordance with ASTM E661, thereby not requiring supplemental screens or railings.

EXAMINATION

A Installer shall examine substrates, supporting structure and Installation conditions.

B. Do not proceed with panel installation until unsatisfactory conditions have been corrected.

INSTALLATION

A. Install the skylight system in accordance with the manufacturer's installation recommendations and approved shop drawings.

1. Anchor component parts securely in place by permanent mechanical attachment system.
2. Accommodate thermal and mechanical movements.
3. Set perimeter framing in a full bed of sealant compound, or with joint fillers or gaskets to provide weather-tight construction.

B. Install joint sealants at perimeter joints and within the panel system in aocord8nce with manufacturer's installation instructions.

CLEANING

A. Clean the skylight system inside and outside, immediately after installation.

B. Refer to manufacturer's written recommendations.

3.0 Vendor Requirements

- Vendor shall deliver f.o.b. to Gallatin, TN.
- A bid deposit of 5% of the total bid is required. This must be in the form of a bid bond, certified check, treasurer's or cashier's check issues to " City of Gallatin, Tennessee."
- Pricing will be good for 180 days

3.0 Evaluation of Proposals

The City of Gallatin will award the contract to lowest responsible and responsive bidder meeting specifications, quality, and performance standards pursuant to the Municipal Purchasing Act of 1983. Response will be based on the following factors;

- Completeness of response
- Cost
- Vendor track record, including references
- Quality of service
- Quality of product

4.0 Contract Award

The City of Gallatin reserves the right to reject any or all proposals and to waive any informality found therein. The City of Gallatin will award a contract based on evaluations described above

5.0 Question Submissions

Gallatin Leisure Services

Attn: David Brown

210 Albert Gallatin Road

Gallatin TN 37066

Telephone: 615-642-1283

Email: david.brown@gallatin-tn.gov

6.0 Proposal Submission

ALL SUBMISSIONS MUST BE SEALED AND CLEARLY MARKED

"Skylight Replacement"

BID DUE DATE: November 9th, 2012 at 1:00 pm

Proposals shall be directed to the attention of:

Finance Department

Attn: J.R.Smith, Jr

132 West Main Street

Gallatin, TN 37066

Telephone: 615-451-5963

Total Price for Removal and Installation: _____

Name of Company: _____

Address: _____

Telephone: _____

Signature: _____

Print Name: _____

Title: _____

Date: _____

Email: _____